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More frequent publication as acceptable material is contributed.

LIST OF AUSTRALASIAN FISHES AVAILABLE FOR EXCHANGE PURPOSES.

Submitted by Gilbert P. Whitley, the Australian Museum, Sydney.

SQUALIDAE. Isistius brasiliensis Quoy & Gaimard.

HETERODONTIDAE. Heterodontus philippi Bloch & Schneider.

ORECTOLOBIDAE. Orectolobus maculatus Bonaterre.

HEMISCYLLIIDAE. Chiloscyllium ocellatum Bonaterre.

DUSSUMIERIIDAE. Stolephorus robustus Ogilby.

GONORHYNCHIDAE. Gonorhynchus greyi Richardson.

LEPTOCEPHALIDAE. Congermuraena habenata Richardson.

SYNODONTIDAE. Saurida tumbil Bloch.

MYCTOPHIDAE. Diaphus caeruleus Klunzinger. Diaphus perspicillatus Ogilby. Dasyscopelus naufragus Waite. Myctophum hygomii Lutken.

MACRORHAMPHOSIDAE. Macrorhamphosus elevatus Waite.

CENTRISCIDAE. Centriscus cristatus De Vis.

SYNGNATHIDAE. Solegnathus spinosissimus Gunther. Phyllopteryx foliatus Shaw. Hippocampus novae-hollandiae Steindachner.

PEGASIDAE. Parapegasus natans Linnaeus.

HEMIRHAMPHIDAE. Hemirhamphus far Forskal. Hyporhamphus intermedius Cantor. Hyporhamphus regularis Gunther.

TRACHICHTHYIDAE. Trachichthys australis Shaw. Hoplostethus intermedius Gunther.

BERYCIDAE. Trachichthodes australis Gunther.

MONOCENTRIDAE. Cleidopus gloriamaris De Vis.

MELANOTAENIIDAE. Melanotaenia nigrans Richardson. Pseudomugil signifer Kner.

STROMATEIDAE. Seriolella brama Gunther.

CORYPHAENOIDIDAE. Coelorhynchus, Paramacrurus, australis Richardson. Coelorhynchus, Paramacrurus, fasciatus Gunther. Lepidorhynchus denticulatus Richardson. Malacocephalus laevis Lowe.

GEMPYLLIDAE. Machaerope latispinis Ogilby.

SCOMBRIDAE. Scomber australasicus Cuvier & Valenciennes.

CARANGIDAE. Alectis ciliaris Bloch. Caranx forsteri Cuvier & Valenciennes.

APOGONIDAE. Apogon savayensis Gunther. Archamia macroptera Kuhl & van Hasselt.

SERRANIDAE. Gilbertia semicincta Cuvier & Valenciennes. Callanthias allporti Gunther. Acanthistius serratus Cuvier & Valenciennes. Caesioperca rasor Richardson.

THERAPONIDAE. Therapon theraps Cuvier & Valenciennes. Therapon servus Bloch.

PLESIOPIDAE. Paraplesiops poweri Ogilby.

DENTICIDAE. Nemipterus theodorei Ogilby.

LETHRINIDAE. Pentapus setosus Cuvier & Valenciennes.

SPARIDAE. Sparus australis Gunther. Pagrosomus auratus Forster.

GIRELLIDAE. Girella elevata Macleay.

GERRIDAE. Xystaema ovatum Gunther.

SCORPIDIDAE. Scorpis violaceus Hutton. Atypichthys latus McCulloch & Waite.

CHAETODONTIDAE. Chaetodon setifer Bloch. Chaetodon aureofasciatus Macleay. Gonochaetodon triangulum Cuvier & Valenciennes.

SCORPAENIDAE. Scorpaena bynoensis Richardson. Neosebastes scorpaenoides Guichenot.

SYNANCEJIDAE. Synanceja horrida Linnaeus.

PATAECIDAE. Pataecus fronto Richardson.

APLOACTIDAE. Aploactis milesii Richardson.

POMACENTRIDAE. Acanthochromis longicaudus Alleyne & Macleay. Amphiprion percula Lacepede. Glyphisodon curacao Bleeker. Glyphisodon palmeri Ogilby. Parma microlepis Gunther. Daya jerdoni Day, var. fusca McCulloch.

ELEOTRIDAE. Philypnodon grandiceps Krefft.

GOBIIDAE. Callogobius hasseltii var. mucosus Gunther. Rhinogobius nebulosus Forskal.

ECHENEIDAE. Echeneis naucrates Linnaeus.

CALLIONYMIDAE. Callionymus calcaratus Macleay.

PARAPERCIDAE. Parapercis cylindrica Bloch.

BLENNIIDAE. Salarias crenulatus Weber. Ecsenius mandibularis McCulloch. Petroscirtes anolius Cuvier & Valenciennes. Petroscirtes rotundiceps Macleay. Petraites fasciatus Macleay. Petraites heptaeolus Ogilby. Tripterygion annulatum Ramsay & Ogilby. Lepidoblennius haplodactylus Steindachner.

BATRACHOIDIDAE. Coryzichthys diemensis Le Sueur.

GOBIESOCIDAE. Diplocrepis costatus Ogilby.

BALISTIDAE. Balistapus aculeatus Linn.

OSTRACIIDAE. Ostracion, Lactoria, cornuta Linn. Anoplocapros lenticularis Richardson.

TETRAODONTIDAE. Tetraodon armilla McCulloch & Waite. Spheroides hamiltoni Richardson.

The above list is subject to slight variation.

A Catalogue of the Fishes of Korea

By TAMEZO MORI,
Professor of Zoology in the Preparatory Department of Keijo Imperial University.
Seoul, Korea.

Family 1. EPTATRETIDAE

1. Eptatretus burgeri (Girard). Nuta-unagi. Fusan.

Family 2. PETROMYZONTIDAE

2. Entosphenus japonicus (Martens). Kawa-yatsume. Tumen R.
3. Lampetra reissneri (Dybowski). Suna-yatsume. Kaniko.

Family 3. HETERODONTIDAE

4. Heterodontus japonicus (Duméril). Neko-zame. Mokpo.

Family 4. CARCHARHINIDAE

5. Triakis scyllium Müller & Henle. Doji-zame. Jinsen.
6. Cynias manazo (Bleeker). Hoshi-zame. Genzan, Mokpo.
7. Cynias griseus (Pietschmann). Inu-zame. Jinsen, Mokpo.

Family 5. SPHYRNIDAE

8. Sphyrna zygaena (Linné). Shumoku-zame Jinsen, Mokpo.

Family 6. ALOPIDAE

9. Alopias vulpinus (Bonnaterre). Onaga-zame. Chinnampo.

Family 7. SQUALIDAE

10. Squalus mitsukurii Jordan & Fowler. Tsuno-zame. Fusan.
11. Squalus japonicus Ishikawa. Togari-Tsunozame. Fusan.
12. Squalus suckleyi (Girard). Jinsen.
13. Squalus brevirostris Tanaka. Fusan.

Family 8. SQUATINIDAE

14. Squatina japonica Bleeker. Kasu-zame. Fusan.

Family 9. PRISTIOPHORIDAE

15. Pristiophorus japonicus Günther. Nokogiri-zame. Mokpo.

Family 10. RHINOBATIDAE

16. Rhinobatos schlegeli Müller & Henle. Sakata-zame. Fusan, Mokpo.

Family 11. RAJIDAE

17. Raja kenojei Müller & Henle. Gangi-ei. Mokpo, Jinsen.
18. Raja meerdervoortii Bleeker. Komonkasube. Fusan.
19. Raja porosa Günther. Mokpo.

Family 12. DASYATIDAE

20. Dasyatis akajei (Müller & Henle). Akaei. Fusan.
21. Urolophus fuscus Garman. Shiroei. Fusan.
22. Pteroplatea japonica Temminck & Schlegel. Yokosaei. Fusan.

Family 13. MYLIOBATIDAE

23. Myliobatis tobijei Bleeker. Tobiei. Fusan, Mokpo.

Family 14. MOBULIDAE

24. Mobula japonica Müller & Henle. Itomakiei. Mokpo.

Family 15. CHIMAERIDAE

25. Chimaera phantasma Jordan & Snyder. Ginzame. Mokpo.

Family 16. ACIPENSERIDAE

26. Acipenser sinensis Gray. Reisui.
27. Acipenser dabryanus Dumeril. Jinsen, Ruganho.
28. Acipenser mikadoi Hilgendorf. Chōzame. Genzan.

Family 17. ELOPIDAE

29. Elops machnata Forskål. Kara-iwashi. Fusan.

Family 18. DROSOMATIDAE

30. Clupanadon punctatus (T. & S.) Konoshiro. Fusan.
31. Clupanadon osbecki (Cuvier & Valenciennes). Jinsen.
32. Clupanadon nasus (Bloch). Chinnampo.

Family 19. CLUPEIDAE

33. Clupea pallasii C. & V. Nishin. Fusan, Genzan.
34. Etrumeus micropus (T. & S.). Urume-iwashi. Fusan, Jinsen.
35. Spratelloides japonicus (Houttuyn). Kibinago. Fusan.
36. Sardinia melanosticta (T. & S.). Iwashi. Fusan.
37. Sardinella immaculata (Kishinouye). Hoshinashi-iwashi. Fusan.
38. Sardinella zunashi (T. & S.). Zunashi. Fusan, Genzan.
39. Ilisha elongata (Bennett). Hira. Jinsen.
40. Zunasia chinensis (Basilewsky). Genzan.

Family 20. ENGRAULIDAE

41. Engraulis japonicus T. & S. Katakuchi-iwashi. Genzan, Fusan.
42. Setipinna gilberti Jordan & Starks. Fusan, Mokpo.
43. Thrissocles hamiltoni (Gray). Fusan.
44. Stolephorus koreanus Kishinouye. Ainoko-iwashi. Ruganho.
45. Coilia nąsus T. & S. Etsu. Fusan.
46. Coilia ectenes Jordan & Seale. Chōsen-etsu. Fusan, Jinsen.

Family 21. SALMONIDAE

47. Oncorhynchus masou (Brevoort). Masu. Seishin.
48. Oncorhynchus keta (Walbaum). Sake. Tumen R., Rakuto R.
49. Oncorhynchus gorbuscha (Walbaum). Karafuto-masu. Joshin.
50. Oncorhynchus ishikawae Jordan & McGregor. Joshin.
51. Oncorhynchus kisutsch (Walbaum). Ginmasu. Tumen R.
52. Hucho ishikawae Mori. Kōrai-ito. Headwaters of Yalu R.
53. Brachymstax lenok (Pallas). Headwaters of Yalu R.
54. Brachymystax sp. Tumen R.
55. Brachymystax sp. Headwaters of Yalu R.
56. Thymallus arcticus jaluensis Mori. Headwaters of Yalu R.

57. Salvelinus malma (Walbaum). Headwaters of Yalu R.
58. Salvelinus latus Ota. Hira-iwana. Tumen R.

Family 22. PLECOGLOSSIDAE

59. Plecoglossus altivelis T. & S. Ayu. Yalu R., Rakuto R., Genzan.

Family 23. OSMERIDAE

60. Osmerus dentex Steindachner. Kiuriuo. Genzan, Seishin.
61. Hypomesus verecundus Jordan & Metz. Chinnampo.
62. Hypomesus olidus (Pallas). Wakasagi. Genzan, Seishin.

Family 24. SALANGIDAE

63. Salangichthys microdon Bleeker. Tumen R.
64. Neosalanx iwasei Wakiya & Takahashi. Mokpo.
65. Protosalanx hyalocranius Abbott. Heijo, Keijo. Yalu R.
66. Salanx coreanus Wakiya & Takahashi.
67. Parasalanx ariakensis Kishinouye. Mokpo.

Family 25. SYNODONTIDAE

68. Saurida eso Jordan & Herre. Tokageeso. Fusan.
69. Saurida argyrophanes (Richardson). Eso.
70. Saurida tumbil Bloch. Chinnampo.
71. Harpodon nehereus Hamilton. Chinnampo.

Family 26. SILURIDAE

72. Parasilurus asotus (Linné). Namazu. Keijo, Taikyu, Heijo.
73. Parasilurus sp. Head water of Yalu R.

Family 27. BAGRIDAE

74. Pelteobagrus fulvidraco (Richardson). Kōrai-gigi. Keijo, Heijo.
75. Pelteobagrus vacheli (Richardson). Keijo.
76. Leiocassis longirostris (Günther). Inoshishi-gigi. Keijo, Heijo.
77. Leiocassis ussuriensis (Dybowski). Heijo.
78. Pseudobagrus emarginatus Sowerby. Yalu R.
79. Liobagrus andersonii Regan. Keijo, Seishu.
80. Liobagrus ? reini Hilgendorf. Akaza. Kokujo.

Family 28. COBITIDAE

81. Cobitis taenia Linné. Shima-dojō. Tumen R.
82. Cobitis sinensis Sauvage. Kara-shima-dojō. Keijo, Heijo.
83. Misgurnus anguillicaudatus (Cantor). Dojō. Very common.
84. Misgurnus decemcirrosus Basilewsky. Kara-dojō. Keijo, Heijo.
85. Lefua costata Kessler. Hime-dojō. Tumen R.
86. Lefua pleskei (Herzenstein). Ichimoji-dojō. Kōgen.
87. Barbatula toni (Dybowski). Takanoha-modoki. Tumen R., Yalu R.
88. Barbatula intermedia (Kessler). Tumen R.
89. Barbatula pechiliensis (Fowler). Heijo.

Family 29. CYPRINIDAE

90. Cyprinus carpio Linné. Koi. Very common.
91. Carassius auratus (Linné). Funa. Very common.
92. Hemibarbus labeo (Pallas). Korai-nigoi. Keijo, Heijo.
93. Hemibarbus mylodon Berg. Waiyo.
94. Hemibarbus longirostris Regan. Dunaga-nigoi. Taiden, Keijo.
95. Pseudogobio esocinus T. & S. Kamatsuka. Keijo, Taikyu.
96. Pseudogobio rivularis (Basilewsky). Suigen, Kōshu.
97. Pseudogobio yaluensis Mori. Yalu R.
98. Gnathopogon strigatus (Regan). Keijo, Taikyu.
99. Gnathopogon coreanus (Berg). Waiyo.
100. Gnathopogon tsuchigae Jordan & Hubbs. Heijo.
101. Gnathopogon majimae Jordan & Hubbs. Heijo.
102. Gnathopogon longifilis Jordan & Hubbs. Heijo.
103. Pseudorasbora parva T. & S. Mutsugo. Very common.
104. Ladislavia taczanowskii Dybowski. Yalu R., Waiyo.
105. Sarcocheilichthys morii Jordan & Hubbs. Heijo, Keijo.
106. Sarcocheilichthys koreensis Mori. Junshō.
107. Sarcocheilichthys kobayashii Mori. Taikyu.
108. Sarcocheilichthys wakiyae Mori. Chōko.
109. Sarcocheilichthys soldatovi (Berg). Yalu R.
110. Saurogobio dabryi Bleeker. Yalu R., Keijo.
111. Saurogobio athymius (Jordan & Starks). Jinsen.
112. Gobio gobio Linné. Tumen R., Yalu R.
113. Gobio gobio macrocephalus Mori. Tumen R.
114. Coreius cetopsis (Kner). Jinsen.
115. Pungtungia herzi Herzenstein. Mugitsuku. Keijo, Heijo, Taikyu.
116. Aphyocypris ensarca (Jordan & Starks). Ruganho, Fusan.
117. Acahara brandti (Dybowski). Tumen R.
118. Acahara waleckii (Dybowski). Yalu R., Tumen R.
119. Acahara hakonensis Günther). Ugui, Ulsan, Fusan.
120. Acahara semotilus (Jordan & Starks). Genzan.
121. Phoxinus phoxinus Linné. Tumen R.
122. Phoxinus lagowski (Dybowski). Tumen R., Yalu R.
123. Phoxinus lagowski variegatus Günther. Tumen R.
124. Phoxinus lagowski oxyrhynchus Mori. Hokusei, Tumen R.
125. Phoxinus percnurus sachalinensis Berg. Tumen R.
126. Phoxinus percnurus mantschuricus Berg. Tumen R.
127. Phoxinus bergi (Jordan & Metz). Genzan.
128. Acahara semotilus (Jordan & Starks). Genzan.
129. Acheilognathus coreanus Steindachner. Korai-tanago. Keijo.

130. Acheilognathus signifer Berg. Waiyo.
131. Acheilognathus cyanostigma Jordan & Starks. Ichimoji-tanago. Chōko.
132. Acheilognathus yamatsutae Mori. Yalu R.
133. Acanthorhodeus asmussi Dybowski. Otanago. Heijo.
134. Acanthorhodeus gracilis Regan. Kanpei, Seishu.
135. Acanthorhodeus taenianalis Günther. Chōko.
136. Rhodeus chosenicus Jordan & Metz. Suigen.
137. Rhodeus ocellatus Günther. Suigen.
138. Rhodeus sericeus (Pallas). Tumen R., Genzan.
139. Pseudoperilampus hondae Jordan & Metz. Suigen.
140. Opsariichthys bidens Günther. Koraihasu. Keijo, Taikyu, Yalu R.
141. Zacco platypus (T. & S.). Hae. Keijo, Taikyu, Yalu R.
142. Zacco temmincki (T. & S.). Kawamutsu. Keijo, Taikyu, Yalu R.
143. Squaliobarbus curriculus (Richardson). Akame. Keijo.
144. Parapelecus jouyi Jordan & Starks. Jinsen.
145. Parapelecus eigenmanni Jordan & Metz. Suigen, Kōkei.
146. Culter ilishaeformis Steindachner. Kawahira. Keijo, Taikyu.
147. Culter recurviceps (Richardson). Jinsen.
148. Culter brevicauda Günther. Taikyu.
149. Hemiculter leuciscus Bleeker. Kawaiwashi. Keijo, Heijo.
150. Ochetobius lucens Jordan & Starks. Jinsen.

Family 30. FLUTIDAE

151. Fluta alba (Zuiew). Ta-unagi. Keijo, Zenshu.

Family 31. ANGUILLIDAE

152. Anguilla japonica (T. & S.). Unagi. Keijo, Heijo, Taikyu.
153. Anguilla bengalensis Gray. Kani-kui. Saishu, Fusan.

Family 32. CONGRIDAE

154. Astroconger myriaster Brevoort. Maanago. Fusan.
151. Anago anago (T. & S.). Anago. Fusan.

Family 33. MURAENESOCIDAE

152. Muraenesox cinereus Forskål. Hamo. Fusan.

Family 34. MURAENIDAE

153. Muraena pardalis T. & S. Tora-utsubo. Mokpo.
154. Gymnothorax kidako (T. & S.). Utsubo. Mokpo.

Family 35. OPHICHTHYIDAE

155. Ophisurus macrorhynchus (Bleeker) Umihebi. Fusan.

Family 36. CYPINODONTIDAE

156. Aplocheilus latipes (T. & S.). Medaka. Heijo, Keijo, taikyu.

Family 37. SYNGNATHIDAE

157. Syngnathus schlegeli Kaup. Yojiuo. Genzan.
158 Hippocampus coronatus T. & S. Tatsunootoshigo, Reisui.

Family 38. AULORHYNCHIDAE

159. Aulichthys japonicus Brevoort. Kudayagara, Fusan.

Family 39. GASTEROSTEIDAE

160. Gasterosteus cataphactus Pallas. Itouo. Koryo, Fusan.
161. Pungitius sinensis (Guichenot). Tomiyo. Genzan.
162. Pungitius brevispinosus (Otaki). Kitano-tomiyo. Seishin.

Family 40. BELONIDAE

163. Tylosurus anastomella (C. & V.). Datsu. Fusan.

Family 41. HEMIRHAMPHIDAE

164. Hyporhamphus sajori (T. & S.). Sayori. Fusan, Jinsen.

Family 42. SCOMBRESOCIDAE

165. Cololabis saira (Brevoort). Samma. Fusan.

Family 43. EXOCOETIDAE

166. Cypselurus hirundo (Steindachner). tsubame-tobino-uo. Fusan.
167. Cypselurus agoo (T. & S.). Tobino-uo. Reisui.

Family 44. MONOCENTRIDAE

168. Monocentris japonicus C. & V. Matsukauo. Fusan.

Family 45. SPHYRAENIDAE

169. Sphyraena obtusata C. & V. Kamasu. Fusan.
170. Sphyraena pinguis Günther. Fusan.

Family 46. OSPHROMENIDAE

171. Macropodus opercularis (Linné). Keijo, Heijo, Taikyu.

FAMILY 47. OPHIOCEPHALIDAE

172. Ophicephalus argus (Cantor). Fusan, Keijo, Heijo.

Family 48. MUGILIDAE

173. Mugil cephalus Linné. Bora. Fusan.
174. Liza haematocheila (T. & S.). Sukuchi. Keijo, Fusan, Genzan.

Family 49. BERYCIDAE

175. Beryx decadactylus Cuvier. Kimmedai. Fusan.

Family 50. CYBIIDAE

176. Scomber japonicus Houttuyn. Saba, Fusan, Seishin.
177. Scomberomorus sinensis (Lacépède). Inu-sawara. Fusan.
178. Cybium koreanum Kishinouye, Hirasawara. Fusan.
179. Sawara niphonia (C. & V.). Sawara. Fusan.
180. Auxis thazard Lacépède. Sōda-Katsuo. Fusan.

Family 51. ACANTHOCYBIIDAE

181. Acanthocybium sara Bennet. Oki-sawara, Fusan, Mokpo.

Family 52. THUNNIDAE

182. Thunnus orientalis (T. & S.). Suji-gatsuo. Fusan.

Family 53. TRICHIURIDAE

183. Trichiurus japonicus T. & S. Tachi-nouo. Jinsen, Makpo.
184. Trichiurus muticus Gray. Chinnampo.

Family 54. CARANGIDAE

185. Trachurus japonicus (T. & S.). Ma-aji. Fusan.
186. Trachurops torva (Bloch). Fusan.
187. Seriola aureovittata T. & S. Hiramasa. Fusan.

188. Seriola quinqueradiata (T. & S.). Buri. Fusan.
189. Decapterus muroadsi T. & S. Muro-aji. Fusan.
190. Caranx equula T. & S. Hira-aji. Fusan.

Family 55. STROMATEIDAE

191. Psenopsis anomala (T. & S.). Ibota. Fusan.

Family 56. PAMPIDAE

192. Pampus argenteus (Euphrasen) Managatsuo. Fusan, Jinsen.
193. Pampus echinogaster (Basilewsky) Korai-managatsuo. Chinnampo.

Family 57. EQUULIDAE

194. Leiognathus argentea (Houttuyn) Hiiragi. Fusan.
195. Leiognathus rivulata (T. & S.). Okihiiragi. Fusan.

Family 58. RACHYCENTRIDAE

196. Rachycentron canadum (Linné), Sugi. Fusan.
197. Rachycentron nigrum Bloch. Gunzan.

Family 59. APOGONIDAE

198. Apogon lineatus (T. & S.). Tenjiku-dai. Fusan, Genzan.

Family 60. PRIACANTHIDAE

199. Priacanthus macracanthus C & V. Benjimebaru. Fusan.

Family 61. MORONIDAE

200. Lateolabrax japonicus C. & V. Suzuki. Fusan, Genzan, Jinsen.

Family 62. EPINEPHELIDAE

201. Coreoperca herzi Herzenstein. Kōrai-oyanirami. Keijo, Taikyu, Heijo.
202. Coreoperca kawamebari (T. & S.). Oyanirani. Chōko.
203. Siniperca chua-tsi (Basilewsky). Keijo, Heijo.
204. Siniperca scherzeri Steindachner. Chōko.
205. Stereolepis ischinagi (Hilgendorf). Ishinagi. Fusan.
206. Epinephelus tsirimenara (T. & S.). Chirimennara. Fusan.
207. Epinephelus septemfasciatus (Thunberg). Mahata. Fusan.
208. Epinephelus awoara (T. & S.). Aoara. Fusan.
209. Epinephelus ionthus Jordan & Metz. Fusan.

Family 63. HAEMULIDAE

210. Pomadasis hasta (Bloch). Fusan.
211. Hapalogenys nigripinnis (T. & S.). Seto-dai. Fusan.
212. Hapalogenys mucronatus (Eydoux & Souleyet). Higedai. Fusan.
213. Plectorhynchus cinctus (T. & S.). Koshōdai. Fusan.
214. Scolopsis inermis T. & S. Tamagashira. Chinnampo.

Family 64. BANJOSIDAE

215. Banjos banjos (Richardson). Chōsenbakama. Fusan.

Family 65. SPARIDAE

216. Pagrosomus major (T. &. S.). Madai. Fusan, Jinsen, Genzan.
217. Evynnis cardinalis (Lacépède). Chadai. Fusan.
218. Taius tumifrons (T. & S.). Kidai Fusan.
219. Sparus macrocephalus (Basilewsky). Kurodai. Jensen, Fusan.

Family 66. SCIAENIDAE

220. Nibea japonica (T. & S.). Nibe. Fusan, Chinnampo.
221. Nibea iharae (Jordan & Metz). Chōsennibe. Fusan, Chinnampo.
222. Nibea albiflora (Richardson). Aka-guchi. Jinsen.
223. Nibea manchurica (Jordan & Thompson). Kiguchi. Jinsen.
224. Nibea schlegeli (Bleeker). Guchi. Fusan, Chinnampo.
225. Laramichthys rathbunae Jordan & Starks. Fusan, Chinnampo.
226. Othonias undovittatus Jordan & Seale. Chinnampo.
227. Collichthys lucidus Richardson.
228. Collichthys fragilis Jordan & Seale. Fusan, Chinnampo.
229. Collichthys niveatus Jordan & Starks. Chinnampo.

Family 67. APLODACTYLIDAE

230. Goniistius zonatus C. & V. Takanohadai. Fusan.

Family 68. MULLIDAE

231. Upeneoides bensasi (T. & S.). Himeji. Jinsen.

Family 69. POLYNEMIDAE

232. Polydactylus plebeius (Broussonet). Tsubame-Konoshiro. Fusan.
233. Polydactylus prionostomus (Basilewsky).

Family 70. OPLEGNATHIDAE

234. Oplegnathus fasciatus (T. & S.). Ishidai. Fusan.

Family 71. SILLAGINIDAE

235. Sillago sihama (Forskål). Kisu. Fusan.
236. Sillago japonicus (T. & S.). Ao-kisu. Fusan.

Family 72. LATILIDAE

237. Latilus japonicus (Houttuyn). Smadai. Fusan.

Family 73. EMBIOTOCIDAE

238. Ditrema temmincki Bleeker. Umitanago. Fusan, Genzan.
239. Neoditrema ransonneti Steindachner. Oki-tanago. Fusan.

Family 73a. POMACENTRIDAE

240. Chromis notatus T. & S. Suzume-dai. Fusan.

Family 74. LABRIDAE

241. Semicossyphus reticulatus C. & V. Kobudai. Fusan.

Family 75. CORIDAE

242. Pseudolabrus japonicus (Houttuyn). Sasanoha-bera. Fusan.
243. Halichoeres bleekeri Steind. & Döderl. Hon-bera. Fusan.
244. Halichoeres poecilopterus (T. & S.). Kiusen. Fusan.
245. Duymaeria flagellifera C. & V. Ohagurobera. Fusan.

Family 76. ZEIDAE

246. Zeus japonicus C. & V. Mato-dai. Fusan.

Family 77. TEUTHIDAE

247. Teuthis fuscescens (Houttuyn). Fusan.

Family 78. MONACANTHIDAE

248. Monacanthus japonicus (Tilesius). Yosogi. Fusan.
249. Monacanthus cirrhifer T. & S. Kawahagi. Fusan.
250. Pseudomonacanthus unicornu (Bas.) Umarurahagi. Fusan.

251. Alutera monoceros Osbeck. Nagasaki-ikkaku-hagi. Fusan.

Family 79. TETRAODONTIDAE

252. Spheroides rubripes (T. & S.) Tora-fugu. Fusan, Seishin.
253. Spheroides pardalis (T. & S.). Higan-fugu. Genzan, Seishin.
254. Spheroides xanthopterus T. & S. Shima-fugu. Chinnampo.
255. Spheroides niphobles Jordan & Snyder. Kusa-fugu. Genzan.
256. Spheroides borealis Jordan & Snyder. Oshu-fugu. Seishin.
257. Spheroides vermicularis (T. & S.). Nagoya-fugu. Seishin.
258. Spheroides basilewskianus (Basilewsky). Chinnampo.
259. Spheroides ocellatus (Osbeck). Me-fugu. Keijo, Heijo.
260. Spheroides alboplumbeus (Richardson). Komon-fugu. Fusan.

Family 80. TRICHODONTIDAE

261. Arctoscopus japonicus Steindachner. Chinnampo.

Family 81. SCORPAENIDAE

262. Sebastodes schlegeli (Hilgendorf). Kuro-mebaru. Seishin, Fusan, Chinnampo.
263. Sebastodes güntheri Jordan & Starks. Mebaru, Chinnampo.
264. Sebastodes ijimae Jordan & Metz. Fusan.
265. Sebastodes inermis (C. & V.). Kurosoi. Jinsen, Fusan.
266. Sebastodes taczanowskii (Steindachner). Ezo mebaru. Genzan.
267. Pteropodus trivitattus (Hilgendorf). Shimasoi, Jinsen, Seishin.
268. Pteropodus mitsukurii (Cramer). Mitsukuri-mebaru. Fusan.
269. Pteropodus pachycephalus (T. & S.). Murasoi. Jinsen.
270. Sebastichthys elegans (Steind. & Döderl.). Yoroi-mebaru. Fusan.
271. Sebastichthys vulpes (Steind. & Döderl.). Fusan.
272. Sebastichthys marmoratus (C. & V.). Kasago. Fusan.
273. Inimicus japonicus C. & V. Oni-okoze. Ruganho.
274. Hypodytes rubripinnis (T. & S.). Ha-okoze. Fusan.

Family 82. HEXAGRAMMIDAE

275. Pleurogrammus azonus Jordan & Metz. Seishin.
276. Agrammus agrammus (T. & S.). Kujime. Fusan, Genzan.
277. Hexagrammos otakii Jordan & Snyder. Sinamę. Fusan, Chinnampo.
278. Hexagrammos aburako Jordan & Starks. Fusan.

Family 83. COTTIDAE

279. Cottus poecilopus Heckel. Yalu R., Heijo, Waiyo.
280. Cottus czerskii Berg. Tumen R.
281. Myoxocephalus jaok (C. & V.). Tuman R.
282. Ceratocottus namiyei Jordan & Snyder. Onikajika.
283. Trachydermis fasciatus Heckel. Sikake. Yalu R. Keijo.
284. Gymnocanthus intermedius (T. & S.). Sikajika. Fusan.
285. Furcina ishikawae Jordan & Starks. Sarasa-Kajika. Fusan.
286. Bero elegans (Steindachner). Bero. Jinsen, Fusan.
287. Pseudoblennius percoides (Richardson) Ana-haze. Fusan.
288. Pseudoblennius marmoratus Steindachner. Aya-anahaze.

Family 84. HEMITRIPTERIDAE

289. Hemitripterus villosus (Pallas). Kajika. Joshin.

Family 85. PARABEMBRIDAE

290. Parabembras curtus (T. & S.). Ubagochi. Fusan.

Family 86. PLATYCEPHALIDAE

291. Platycephalus indicus Linné. Gin-gochi. Fusan.
292. Cocius crocodilus (Tilesius) Ine-kochi. Fusan.
293. Inegocia japonica (Tilesius) Tokage-gochi. Fusan.

Family 87. TRIGLIDAE

294. Cheilidonichthys kumu (Lesson & Garnot). Hōbo. Fusan.
295. Lepidotrigla guntheri Hilgendorf. Kanado. Jinsen.
296. Lepidotriga microptera (Günther).

Family 88. PERISTEIDIDAE

297. Peristedion orientale T. & S. Ki-hōbo. Fusan.

Family 89. AGONIDAE

298. Tilesina gibbosa Schmidt. Oni-shachi-uo. Genzan.
299. Percis japonica (Pallas). Inu-gochi. Seishin.
300. Podothecus gilberti (Collett). Kōri-tokubire. Genzan.
301. Podothecus thompsoni Jordan & Gilbert. Yase-tokubire. Seishin.
302. Podothecus accipiter Jordan & Starks. Taka-tokubire. Seishin.
303. Podothecus hamlini Jordan & Gilbert. Hakkaku-uo. Joshin.
304. Anoplagonus inermis (Günther). Genzan.
305. Agonomalus jordani Schmidt. Genzan.
306. Draciscus sachi Jordan & Snyder. Shachi. Joshin.

Family 90. ECHENEIDAE

307. Echeneis naucrates (Linné). Kobanitadaki. Reisui.

Family 91. CYCLOGASTERIDAE

308. Cyclogaster tanakae Gilbert & Burke. Kusa-uo. Fusan.

Family 92. CYCLOPTERIDAE

309. Eumicrotremus orbis (Günther). Ibodango. Seishin.

Family 93. ELEOTRIDAE

310. Odontobutis obscurus (T. & S.). Donko. Keijo.
311. Odontobutis potamophilus Günther. Yalu R.
312. Percottus glehni Dybowski. Tumen R.

Family 94. PERIOPHTHALMIDAE

313. Periophthalmus cantonensis (Osbeck). Tobi-haze. Jinsen, Fusan.
314. Apocryptes chinesis Osbeck. Mutsugorō. Fusan.

Family 95. GOBIIDAE

315. Rhinogobius bernadoui (Jordan & Starks).
316. Rhinogobius similis (Gill). Yoshinobori. Fusan.
317. Rhinogobius hadropterus (Jordan & Snyder). Gokuraku-haze. Suigen, Keijo.

318. Rhinogobius pflaumi (Bleeker). Moyō-haze.
319. Rhinogobius bedfordi Regan. Seishu.
320. Rhinogobius sowerby Ginsburg. Yalu-R.
321. Chaenogobius macrognathus (Bleeker). Ukigori. Seishin, Genzan, Tumen R.
322. Aboma tsushimae Jordan & Fowler. Tsushima-haze. Fusan.
323. Chloea sarchynnis Jordan & Snyder. Niku-haze. Genzan.
324. Chloea nakamurae Jordan & Richardson. Koshino-haze. Genzan.
325. Chloea laevis (Steindachner). Shikaku-haze. Ulchin.
326. Pterogobius elapoides (Günther). Niji-ki-nobaru.
327. Pterogobius zonoleucus Jordan & Snyder. Shirosuji-haze. Fusan.
328. Chasmichthys gulosus (Sauvage). Dorome. Genzan, Fusan.
329. Chasmichthys dolichognathus (Hilgendorf). Ago-haze. Genzan.
330. Acanthogobius flavimanus (T. & S.). Ma-haze. Genzan, Fusan.
331. Acanthogobius hasta (T. & S.). Uguihaze. Jinsen, Chinnampo.
332. Acanthogobius stigmathonus (Richardson). Fusan.
333. Chaeturichthys hexanemus Bleeker. Dainan-haze. Fusan.
334. Chaeturichthys stigmatius Richardson. Yakün-haze. Ruganho.
335. Triaenopogon barbatus (Günther). Shōki-haze. Ruganho.
336. Tridentiger obscurus (T. & S.). Chichibu. Genzan, Tumen R, Jinsen.
337. Tridentiger bifasciatus Steindachner. Shima-haze. Fusan, Genzan.
338. Lophiogobius ocellicauda Günther (Rawelina). Chinnampo.

Family 96. GOBIOIDIDAE

339. Taenioides abbotti Jordan & Starks. Manshu-warazubo. Jinsen, Ruganho.
340. Taenioides lacepedei (T. & S.). Warazubo. Reisui.

Family 97. PARAPERCIDAE

341. Parapercis snyderi Jordan & Starks. Korai-torakisu.
342. Neopercis sexfasciatus (T. & S.). Kurakake-kisu. Fusan, Jinsen.

Family 98. TRICHODONTIDAE

343. Arctoscopus japonicus (Steindachner). Hatahata. Genzan.

Family 99. URANOSCOPIDAE

344. Uranoscopus japonicus Houttuyn. Mishima-okoze. Fusan.
345. Uranoscopus bicinctus T. & S. Naganeuo. Fusan.
346. Gnathagnus elongata (T. & S.). Somishima. Fusan.

Family 100. CALLIONYMIDAE

347. Callionymus valenciennesi (T. & S.). Nezumi-Gochi. Fusan.
348. Callionymus lunatus (T. & S.). Numerigochi. Fusan.
349. Calliurichthys japonicus (Houttuyn). Yone-gochi.

Family 101. PHOLIDAE

350. Pholis taczanowskii (Steindachner). Hakodate-ginbo. Genzan, Fusan.
351. Enedrias nebulosus (T. & S.). Ginbo. Fusan, Genzan.

Family 102. CEBIDICHTHYIDAE

352. Zoarchias aculeatus Basilewsky.
353. Dictyosoma temmincki Bleeker. Dainan-ginbo. Fusan.

Family 103. STICHAEIDAE

354. Dinogunnellus grigorjewi (Herzenstein). Nagazuka. Jōshin, Chinnampo.
355. Ernogrammus hexagrammus (T. & S.). Musuji-gaji. Genzan.

Family 104. ZOARCIDAE

356. Zoarces gilli Jordan & Starks. Kōraigaji. Fusan.

Family 105. GADIDAE

357. Eleginus navaga (Koelreuter). Tumen R.
358. Gadus macrocephalus Tilesius. Tara. Genzan.
359. Theragra chalcogramma (Pallas). Suketō-tara. Genzan, Seishin.
360. Lota lota Linne. Headwater of Yalu R.

Family 106. HIPPOGLOSSIDAE

361. Paralichthys coreanicus Schmidt. Hirame. Fusan, Genzan.
362. Paralichthys percocephalus (Basilewsky).
363. Paralichthys olivaceus (T. & S.). Fusan, Jinsen.
364. Verasper variegatus (T. & S.). Hoshigarei. Fusan.
365. Verasper moseri Jordan & Gilbert. Kurosuji-karei. Chinnampo.
366. Cleisthenes herzensteini (Schmidt). Chigo-garei. Seishin.
367. Xystrias grigorjewi (Herzenstein). Mushi-garei. Fusan, Genzan.

Family 107. PLEURONECTIDAE

368. Pleuronichthys cornutus T. & S. Meitakarei. Fusan.
369. Platichthys stellatus (Pallas). Takanoha-karei. Genzan.
370. Kareius bicoloratus (Basilewsky). Ishigarei. Genzan.
371. Liopsetta obscura (Herzenstein). Kurokarei. Jinsen, Genzan.
372. Lepidopsetta bilineata (Ayres). Kokegarei. Genzan.
373. Limandella yokohamae Günther. Makogarei. Genzan.
374. Limandella schrencki Schmidt. Korigarei. Genzan.
375. Limanda aspera (Pallas). Ibo-garei. Seishin.
376. Clidoderma asperrimum (T. & S.). Same-garei.
377. Microstomus stelleri Schmidt. Babagarei.

Family 108. SYNAPTURIDAE

378. Zebrias fasciatus (Basilewsky). Fusan.
379. Zebrias japonicus (Bleeker). Seto-ushinoshita. Fusan.

Family 109. CYNOGLOSSIDAE

380. Symphurus orientalis (Bleeker). Azuma-garei.
381. Areliscus hollandi Jordan & Metz. Ushinoshita. Fusan.
382. Areliscus abbreviatus (Gray). Fusan.
383. Areliscus rhomaleus Jordan & Starks. Jinsen.
384. Areliscus gracilis Günther.

Family 110. LOPHIDAE

385. Lophius litulon (Jordan & Sindo). Kiankō. Fusan.
386. Lophiomus setigerus (Vahl). Ankō. Fusan.

A Check of the Marine Fishes of Oregon and Washington

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This paper is a unit in the series of check-lists of Pacific fishes being published in this journal. It covers an area which, except for Puget Sound, has largely been neglected by ichthyologists. This gap in our knowledge of West American fishes was one of the chief incentives which led me, with Leonard P. Schultz as assistant, to collect extensively on the coast of Oregon and Washington in the summer of 1926. In this work we obtained one new species (*Pholis schultzi*) and a considerable number of others hitherto known only to the south or north of these states. These new extensions of ranges are duly incorporated into the following list.

There are included in the list, in addition to the shore-fishes, the deep-water and pelagic fishes which have been captured off the coast, and the anadromous and estuarine fishes, and the very near relatives of these even if known only from strictly fresh water; also the few freshwater species which descend into the bays to mingle with marine types.

One new generic name is here proposed—*Decagrammus,* in the family *Hexagrammidae.*

As I hope later to discuss the fish fauna of Oregon and Washington in greater detail, I ask my colleagues to call my attention to any omissions or errors which they may discover in the present list.

In order to interpret the nomenclature adopted in this paper, when at variance with that generally employed by other writers, reference may be made to my several reports on the fishes of Western North America. For convenience in this connection, and as a collation of my work, there is included a complete list of my papers on the fishes of the North Pacific.

1915a. Flounders and soles from Japan collected by the United States Bureau of Fisheries Steamer "Albatross" in 1906. Proc. U. S. Nat. Mus., 48: 449-496, pl. 25-27.

1916a. Notes on the marine fishes of California. Univ. Calif. Publ. Zool., 16: 153-169, pl. 18-20.

1916b. Report on the Japanese macruroid fishes collected by the United States Fisheries Steamer "Albatross" in 1906, with a synopsis of the genera. Proc. U. S. Nat. Mus., 51: 135-214, pl. 8-11. (Junior author with Charles Henry Gilbert.)

1916c. Notes on the distribution of three California rays. Copeia, 37: 87-88.

1916d. A second record of the scombroid fish *Germo macropterus* from the coast of California. Copeia, 38: 93.

1917a. A note on the food of *Squalus sucklii,* the California dogfish. Copeia, 43: 37-38.

1917b. The fishes of the Santa Ana system of streams in southern California. Lorquinia, 1: 82-83. (Junior author, with George B. Culver.)

1917c. The breeding habits of the viviparous perch, *Cymatogaster.* Copeia, 47: 72-74.

1917d. Description of *Hymenocephalus tenuis,* a new macruroid fish from the Hawaiian Islands. Proc. U. S. Nat. Mus., 54: 173-175. (Junior author, with Charles Henry Gilbert.)

1918a. *Colpichthys, Thyrinops,* and *Austromenidia,* new genera of atherinoid fishes from the New World. Proc. Acad. Nat. Sci. Phila., 1917: 305-308.

1918b. A revision of the viviparous perches. Proc. Biol. Soc. Wash., 31: 9-14.

1918c. The fishes of the genus *Atherinops,* their variation, distribution, relationships and history. Bull. Am. Mus. Nat. Hist., 38: 409-440, 1 map.

1918d. The flight of the California flyingfish. Copeia, 62: 85-88.

1918e. Supplementary notes on flounders from Japan with remarks on the species of *Hippoglossoides.* Ann. Zool. Jap., 9: 369-376.

1919a. The stickleback: a fish eminently fitted by nature as a mosquito destroyer. Calif. Fish and Game, 5: 21-24.

1919b. Studies in ichthyology. A monographic review of the family of *Atherinidae* or silversides. Stanford Univ. Publ. (Univ. Ser.): 1-87, pl. 1-12. (Junior author, with David Starr Jordan.)

1920a. The macruroid fishes of the Philip-

pine Islands and the East Indies. Bull. U. S. Nat. Mus., 100, 1 (7): 369-588, fig. 1-40.

1920b. Protective coloration and habits in the kelp-fish. Copeia, 80: 19-20.

1920c. The bionomics of *Porichthys notatus* Girard. Am. Nat., 54: 380-384.

1920d. Notes on the rays of California. Copeia, 86: 81-82.

1920e. A note on the California species of Osmerus. Copeia, 88: 97-98.

1921a. Notes on *Cottus asper* and *Cottus aleuticus*. Copeia, 90: 7-8.

1921b. Description of a new sciaenoid fish from Santa Catalina Island, California. Occ. Pap. Mus. Zool, Univ. Mich., 92: 1-3, pl. 1.

1921c. The latitudinal variation in the number of vertical fin-rays in *Leptocottus armatus*. *Ibidem*, 94: 1-7, 1 map.

1921d. Notes on the clupeoid fishes collected by Edmund Heller in San Filipe Bay, Gulf of California. Proc. Biol. Soc. Wash., 34: 47-48.

1921e. The ecology and life-history of *Amphigonopterus aurora* and of other viviparous perches of California. Biol. Bull., 40: 181-209, fig. 1-5.

1921f. Description of a new genus and species of goby from California with notes on related species. Occ. Pap. Mus. Zool. Univ. Mich., 99: 1-5.

1921g. Notes on the pipe-fishes of California. *Ibidem*, 100: 1-4.

1921h. Notes on Sebastodes. 1. A second record of *Sebastodes atrorubens* Gilbert. 2. The food of *Sebastodes auriculatus* Girard. Copeia, 93: 27-28.

1921i. Notes on a postlarval sciaenoid fish with three anal spines. Copeia, 101: 86.

1922a. A list of the lancelets of the world with diagnoses of five new species of *Branchiostoma*. Occ. Pap. Mus. Zool. Univ. Mich., 105: 1-16.

1922b. A revision of the Holarctic lampreys. *Ibidem*, 120: 1-14, pl. 1. (Junior author with Charles W. Creaser.)

1924a. The life-cycle and growth of lampreys. Pap. Mich. Acad. Sci., Arts and Letters, 4: 587-603, fig. 16-22.

1924b. Studies of the fishes of the order *Cyprinodontes*. I—IV. Univ. Mich. Mus. Zool. Misc. Publ., 13: 1-31, pl. 1-4.

1924c. Studies of the fishes of the order *Cyprinodontes*. V. Notes on the species of *Goodea* and *Skiffea*. Occ. Pap. Mus. Zool. Univ. Mich., 148: 1-8.

1925a. Racial and seasonal variation in the Pacific herring, California sardine and California anchovy. Calif. Fish and Game Comm., Fish. Bull. No. 8: 1-23, pl. 1-4.

1925b. A revision of the osmerid fishes of the North Pacific. Proc. Biol. Soc. Wash., 38: 49-55.

1925c. Record of fishes obtained by David Starr Jordan in Japan, 1922. Mem. Carn. Mus., 10: 93-346, fig. 1 and pl. 5-12. (Junior author with David Starr Jordan.)

1926a. The metamorphosis of the California ribbon-fish, *Trachypterus rex-salmonorum*. Pap. Mich. Acad. Sci., Arts and Letters, 5: 469-476, fig. 26.

1926b. The structural consequences of modifications of the developmental rate in fishes, considered in reference to certain problems of evolution. Am. Nat., 60: 57-81.

1926c. Notes on the gobioid fishes of California, with descriptions of two new genera. Occ. Pap. Mus. Zool, Univ. Mich., 169: 1-6, pl. 1.

1926d. Descriptions of new genera of cottoid fishes related to *Artedius*. *Ibidem*, 170: 1-16.

1926e. A revision of the fishes of the subfamily *Oligocottinae*. *Ibidem*, 171: 1-18.

1926f. The supposed intergradation of the two species of *Sebastolobus* (a genus of scorpaenoid fishes) of Western America. Am. Mus. Nov., 216: 1-9.

1926g. Studies of the fishes of the order *Cyprinodontes*. VI. Material for a revision of the American genera and species. Univ. Mich. Mus. Zool. Misc. Publ., 16: 1-84, pl. 1-3.

1927a. The range of *Cottus aleuticus*. Copeia, 162: 3-4.

1927b. Notes on the blennioid fishes of western North America. Pap. Mich. Acad. Sci., Arts and Letters, 7, 1926: 351-394.

1928a. The northward occurrence of southern forms of marine life on the Pacific Coast in 1925 and 1926. Calif. Fish and Game (in press).

1928b. *Pholis schultzi*: a new species of blennioid fish from the West Coast of the United States. Occ. Pap. Mus. Zool. Univ. Mich. (in press).

In the following list references are frequently made to the foregoing bibliography, as a brief method of explaining the nomenclature adopted. These references are given in parentheses following the specific name. The item in parentheses following the serial number for each species is the number used by Jordan and Evermann, in their great report on the *Fishes of North and Middle America*. In that work the descriptions, synonymies, and keys necessary for the understanding and identification of most of the forms may be found. I have studied Oregon or Washington material of all those species which are notated with an asterisk. A few of the species included may have been erroneously ascribed to the area treated in this check-list. Further investigations will no doubt markedly increase the list.

Family I.

EPTATRETIDAE. The hagfishes.

1. (5) *Polistotrema stouti** (Lockington). California hagfish.
2. *Polistotrema deani** Evermann and Goldsborough. Alaska hagfish. (1926f: 1) Specimens at hand from Oregon, taken at latitude 43° 54′.

Family II.

PETROMYZONIDAE. The lampreys.

3. (11) *Entosphenus tridentatus** (Gairdner). Pacific lamprey. (1922b: 6 and 10; 1924a: 588 and 592)
4. (14, part) *Lampetra fluviatilis** (Linnaeus). European river lamprey. (1922b: 7 and 12)

5. (14, part) *Lampetra planeri** (Bloch). European brook lamprey. (1922b: 7 and 13; 1924a: 590 and 594)

Family III.

HEXANCHIDAE. The cow sharks.

6. (17) *Notorhynchus maculatus* Ayres. Mud shark.
7. (18) *Hexanchus griseus* (Gmelin). Shovelnose shark.

Family IV.

SCYLLIORHINIDAE. The cat sharks.

8. (24) *Scylliorhinus brunneus* (Gilbert). Brown shark.

Family V.

GALEIDAE. The gray sharks.

9. (38) *Prionace glauca* (Linnaeus). Blue shark.
10. (63) *Alopias vulpes** (Gmelin). Thresher shark. (1928a) Taken in 1926 in Coos Bay, Oregon.

Family VI.

LAMNIDAE. The mackerel sharks.

11. (67) *Lamna nasus* Bonnaterre. Salmon shark. Has been recorded from California and Alaska (perhaps erroneously).

Family VII.

SQUALIDAE. The dogfishes

12. (72) *Squalus suckleyi** (Girard). California dogfish. (1917a; and 1925c: 103)
13. (76) *Somniosus microcephalus* (Bloch and Schneider). Sleeper shark.

Family VIII.

RAJIDAE. The skates.

14. *Raja kincaidi** Garman. Black skate.
15. (103) *Raja inornata* Jordan and Gilbert. California skate. (1916a: 153) recorded by Gilbert from Straits of Juan de Fuca.
16. (102) *Raja binoculata** Girard. Once Big skate. (1916c: 87, and 1920d: 81)
17. (101) *Raja rhina* Jordan and Gilbert. Long-nose skate.
18. (106) *Raja stellulata* Jordan and Gilbert. Prickle skate.
19. (108) *Raja trachura* Gilbert. Rough-tail skate. Known from deep-water off California and Alaska, but not yet actually reported for Oregon or Washington.

Family IX.

CHIMAERIDAE. The chimaeras.

20. (142) *Hydrolagus colliei** (Lay and Bennett). Ratfish.

Family X.

ACIPENSERIDAE. The sturgeons.

21. (145) *Acipenser transmontanus** Richardson. White sturgeon.
22. (146) *Acipenser medirostris** Ayres. Green sturgeon.

Family XI.

CLUPEIDAE. The herrings.

23. (686) *Clupea pallasii** Cuvier and Valenciennes. Pacific herring. (1925a: 5)
24. (687) *Sardinia caerulea** (Girard). California sardine. (1925a: 11)
25. (693) *Alosa sapidissima** (Wilson). Shad. (Introduced.)

Family XII.

ENGRAULIDAE. The anchovies.

26. (738) *Engraulis mordax mordax** Girard. California anchovy. (1925a: 14)

Family XIII.

ALEPOCEPHALIDAE. (Deep-sea fishes.)

27. (748) *Bathytroctes stomias* Gilbert.

Family XIV.

COREGONIDAE. The whitefishes.

28. (755) *Prosopium coulteri* (Eigenmann and Eigenmann). Big-scaled whitefish.
29. (756) *Prosopium williamsoni* (Girard). Rocky Mountain whitefish.
30. *Prosopium oregonium** (Jordan and Snyder). Oregon whitefish.

Family XV.

SALMONIDAE. The salmon and trout.

31. (773) *Oncorhynchus gorbuscha* (Walbaum). Humpback salmon.
32. (774) *Oncorhynchus keta* (Walbaum). Dog salmon.
33. (775) *Oncorhynchus tschawytscha** (Walbaum). King salmon.
34. (776) *Oncorhynchus kisutch** (Walbaum). Silver salmon.
35. (777) *Oncorhynchus nerka** (Walbaum). Sockeye salmon.
36. (779a) *Salmo clarkii clarkii** (Richardson). Cutthroat trout.
37. (781c, on p. 2821) *Salmo crescentis** Jordan and Beardslee. Lake Crescent trout.
38. (781b, on p. 2819) *Salmo beardsleei** Jordan and Seale. Beardslee trout, or blueback trout of Lake Crescent. Other types of trout from Lake Crescent, and Lake Southerland nearby, have received names, but I doubt their distinctness. *Salmo eremogenes* Evermann and Nichols, from Crab Creek, Washington, is perhaps valid.
39. (781) and 781a) *Salmo irideus irideus** Gibbons. Coast rainbow or steelhead.
40. (780) *Salmo irideus gairdneri** Richardson. Columbia River steelhead.
41. (784) *Salvelinus malma parkei** (Suckley). Dolly Varden trout.

Family XVI.

OSMERIDAE. The true smelt.

42. (792) *Allosmerus attenuatus** (Lockington). San Francisco whitebait. (1925b: 53).
43. (790) *Thaleichthys pacificus** (Richardson). Eulachon. (1925b: 53).
44. *Spirinchus starksi** (Fisk). Night surf smelt. (1925b: 53 and 1928a) Taken by us at Yaquina Head, Oregon.
45. (791) *Spirinchus thaleichthys** (Ayres). San Francisco Bay Smelt. (1925b: 54).
46. (796) *Hypomesus olidus* (Pallas). Freshwater smelt. (1925b: 54) Not yet

definitely recorded from Washington or Oregon, though known from Alaska and near San Francisco.

47. (795) *Hypomesus pretiosus** (Girard). Surf smelt. (1925b: 55).

Family XVII.

ARGENTINIDAE. (Deep-sea fishes.)

48. (800) *Leuroglossus stilbius* Gilbert. Recorded only from California and Alaska.

Family XVIII.

MICROSTOMIDAE. (Deep-sea fishes.)

49. (804) *Bathylagus pacificus* Gilbert.

Family XIX.

CHAULIODONTIDAE. The viper fishes.

50. (873) *Cyclothone microdon* (Günther).
51. (878) *Chauliodus macouni* Bean.

Family XX.

CATOSTOMIDAE. The suckers.

52. (288) *Catostomus macrocheilus** Girard. Columbia River sucker. Descending into the bays.

Family XXI.

CYPRINIDAE. The minnows.

53. (352) *Mylocheilus lateralis** Agassiz and Pickering. Columbia River chub. Descending into the bays.

Family XXII.

SCOMBRESOCIDAE. The sauries.

54. (1076) *Cololabis saira* (Brevoort). Pacific saury. (1916a: 157) Recorded only from Japan, Vancouver Island and California.

Family XXIII.

ALEPISAURIDAE. The lancet fishes.

55. (889-893) *Alepisaurus ferox* Lowe. Lancet fish.

Family XXIV.

PARALEPIDAE. (Pelagic fishes,)

56. (898) *Arctozenus coruscans* (Jordan and Gilbert.

Family XXV.

MYCTOPHIDAE. The lantern fishes.

57. (858) *Myctophum californiense* Eigenmann and Eigenmann.
58. (865) *Tarletonbeania crenularis* (Jordan and Gilbert).
59. (841) *Lampanyctus leucopsarus* (Eigenmann and Eigenmann).
60. (842) *Lampanyctus nannochir* (Gilbert).
61. (846) *Diaphus theta* Eigenmann and Eigenmann.

Family XXVI.

NEMICHTHYIDAE. The snipe eels.

62. (606) *Nemichthys avocetta* Jordan and Gilbert.

Family XXVII.

TRACHYPTERIDAE. The ribbon fishes.

63. (2972) *Trachypterus rex-salmonorum* Jordan and Gilbert. California ribbon fish. (1926a).

Family XXVIII.

BERYCIDAE. (Deep-sea fishes.)

64. (1223) *Plectromus lugubris* (Gilbert). Recorded from California and Alaska, but not yet from Oregon or Washington.
65. (1226) *Plectromus cristiceps* (Gilbert).

Family XXIX.

MOLIDAE. The ocean sunfishes.

66. (2172) *Mola mola** (Linnaeus). Sunfish.

Family XXX.

SERRANIDAE. The sea basses.

67. (1530) *Roccus saxatilis* (Walbaum). Striped bass. (Introduced.)

Family XXXI.

CENTRARCHIDAE. The sunfishes and black basses.

68. (1410) *Aplites salmoides** (Lacépède). Large-mouth black bass. (Introduced, and descending into the bays.)

Family XXXII.

ATHERINIDAE. The silversides.

69. (1178) *Atherinopsis californiensis californiensis** Girard. Jack smelt. (1919b: 85) Taken by us in Yaquina Bay, Oregon.
70. *Atherinops affinis oregonia** Jordan and Snyder. Oregon bay smelt. (1918c: 420, and 1919b: 84.) This form proves separable from typical *affinis* as a subspecies.

Family XXXIII.

SPHYRAENIDAE. The barracudas.

71. (1204) *Sphyraena argentea* Girard. California barracuda.

Family XXXIV.

STROMATEIDAE. The butterfishes.

72. (1367) *Peprilus simillimus* (Ayres). California pampano.

Family XXXV.

ACROTIDAE. (Deep-water fishes?)

73. (1372) *Acrotus willoughbyi* Bean.

Family XXXVI.

BRAMIDAE. The pomfrets.

74. (1359) *Brama raraii** (Bloch). Pomfret.

Family XXXVII.

ZAPRORIDAE. (Pelagic fishes?)

75. (1372a, on p. 2850) *Zaprora silenus** Jordan.

Family XXXVIII.

SCOMBRIDAE. The mackerels.

76. (1253, part) *Pneumatophorus diego* (Ayres). California mackerel. (1925c: 211, and 1928a).

Family XXXIX.

CYBIIDAE. The bonitos and Spanish mackerels. (1925c: 212).

77. (1260) *Sarda chilensis* (Cuvier and Valenciennes). California bonito.

Family XL.

THUNNIDAE. The tunas. (1925c: 215)

78. (1258) *Germo alalunga** (Gmelin). Albacore. (1928a) Taken for us between Coos Bay and Suislaw River, Oregon.

Family XLI.

SCIAENIDAE. The croakers.

79. (1789) *Atractoscion nobilis* (Ayres). White sea bass.

Family XLII.

EMBIOTOCIDAE. The viviparous perches.

80. (1886) *Hyperprosopon argenteum** Gibbons. Wall-eyed perch. (1918b: 12).
81. (1887) *Tocichthys ellipticus** (Gibbons). Silver pogie. (1918b: 12) Taken

by us north to Clallam County, Washington; usually called by the latter name, *Hyperprosopon* or *Tocichthys agassizii.*

82. (1888) *Holconotus rhodoterus** Agassiz. Pogie. (1918b: 12, in part). Occurs north to Cape Flattery (northern records of *Amphistichus argenteus* refer to this species).
83. (1882) *Cymatogaster aggregatus** Gibbons. Shiner. (1917c; and 1918b: 11).
84. (1883) *Brachyistius frenatus* Gill. (1918b: 12).
85. (1891) *Taeniotoca lateralis** (Agassiz). Squawfish. (1918b: 11) I have been unable to verify northern records of the related species *Embiotoca jacksoni.*
86. (1892) *Phanerodon furcatus** Girard. Split-tail perch. (1918b: 11)
87. (1896) *Damalichthys argyrosomus** (Girard). Pile perch. (1918b: 11)

Family XLIII.

SCORPAENIDAE. The rock-cods.

88. (2180) *Sebastodes paucispinis** (Ayres). Bocaccio; grouper.
89. *Sebastodes flavidus** (Ayres). Yellowtail black bass. Taken by us northward to Cape Flattery; confounded by Jordan and Evermann (1898, p. 1781) with *S. serranoides,* but properly distinguished by Eigenmann and Eigenmann (1890).
90. (2183) *Sebastodes melanops** (Girard). Black bass.
91. (2185) *Sebastodes mystinus** (Jordan and Gilbert). Black bass.
92. (2193) *Sebastodes alutus* (Gilbert). Long-jaw rock-cod.
93. (2194) *Sebastodes proriger* (Jordan and Gilbert). Rock-cod. Described from Puget Sound by Starks as *S. clavilatus.*
94. (2195) *Sebastodes pinniger** (Gill). Orange rock-cod.
95. (2200) *Sebastodes saxicola* (Gilbert). (1916a: 162, pl. 19).
96. (2201) *Sebastodes crameri* Jordan. Rock-cod.
97. (2203) *Sebastodes diploproa** (Gilbert). A deep-water species, taken for us in Hoods Canal, Washington.
98. (2216) *Sebastodes rupestris* (Gilbert). A deep-water form not yet actually listed for Oregon or Washington, but recorded from southern California and southern Alaska.
99. (2218) *Sebastodes zacentrus* (Gilbert). Another deep-water form; described from Puget Sound as *Sebastodes deani* by Starks.
100. *Sebastodes wilsoni** Gilbert. A deep-water species taken by the "Albatross" at Sta. 3078, off Oregon.
101. *Sebastodes emphaeus* Starks. (Deep-water.)
102. (2219) *Sebastodes elongatus** (Ayres). Reina. (1916a: 163) Taken for us in Hoods Canal.
103. (2206) *Sebastodes introniger* (Gilbert).
104. (2207) *Sebastodes ruberrimus** Cramer. Red rock-cod.
105. (2210) *Sebastodes rosaceus* (Girard).
106. (2221) *Sebastodes rubrivinctus* (Jordan and Gilbert). Spanish flag. Recorded for California and Queen Charlotte Islands.
107. (2222, and 2222a) *Sebastodes auriculatus* (Girard). Brown rock-cod. (1921h: 28).
108. (2224) *Sebastodes caurinus** (Richardson). Rock-cod.
109. (2226) *Sebastodes maliger** (Jordan and Gilbert). Yellow-back rock-cod.
110. (2230) *Sebastodes nebulosus* (Ayres). Chinese rock-cod.
111. (2232) *Sebastodes nigrocinctus* (Ayres). Black-banded rock-cod.
112. (2175) *Sebastolobus alascanus** Bean (1926f)
113. (2176) *Sebastolobus altivelis** Gilbert. (1926f)

Family XLIV.

ANOPLOPOMATIDAE. The black cods.

114. (2255) *Anoplopoma fimbria** (Pallas). Black cod; skil.
115. (2256) *Erilepis zonifer* (Lockington). Priest-fish.

Family XLV.

HEXAGRAMMIDAE. The rock-trout.

116. (2258) *Decagrammus decagrammus** (Pallas). Kelp-cod. *Decagrammus* Hubbs, new genus (type, *Chiropsis constellatus* Girard); characterized by having two pairs of flaps on head, etc.
117. (2259) *Octogrammus octogrammus* (Pallas). Alaska greenfish. (Port Angeles record needs confirmation).
118. (2260) *Hexagrammos stelleri** Tilesius. Greenling.
119. (2261) *Lebius serperciliosus** (Pallas). Kelp-cod.
120. (2263) *Ophiodon elongatus** Girard. Ling-cod.
121. (2264) *Zaniolepis latipinnis** Girard.
122. (2266) *Oxylebius pictus** Gill. Convict-fish.

Family XLVI.

COTTIDAE. The sculpins or bullheads.

123. (2267) *Jordania zonope* Starks.
124. (2268) *Paricelinus hopliticus* Eigenmann and Eigenmann.
125. (2269) *Alcidea thoburni* (Gilbert).
126. (2270) *Scorpaenichthys marmoratus** (Ayres). Blue cod.
127. (2271) *Chitonotus pugetensis** Steindachner).
128. (2273) *Tarandichthys filamentosus** (Gilbert).
129. (2273) *Tarandichthys tenuis** (Gilbert). Dredged by us in Hoods Canal, and by J. R. Dymond in Departure Bay, British Columbia.
130. (2277) *Icelinus borealis** Gilbert. *I. strabo* is now regarded as a synonym of this species.

131. *Icelinus burchami** Evermann and Goldsborough. Taken by us in Hoods Canal; described from California by Gilbert as *Icelinus fuscescens*.
132. (2281, and 2284) *Astrolytes fenestralis** Jordan and Gilbert). (1926d: 1).
133. (2280) *Parastrolytes notospilotus** (Girard). (1926d: 2).
134. (2283) *Artedius lateralis** (Girard). (1926d: 7).
135. (2285) *Axyrias harringtoni** Starks.
136. (2289) *Ruscarius meanyi** Jordan and Starks.
137. (2297) *Radulinus boleoides* Gilbert.
138. (2298) *Radulinus asprellus** Gilbert.
139. (2301) *Triglops beani* Gilbert.
140. (2304) *Prionistius macellus* Bean.
141. (2308) *Hemilepidotus hemilepidotus** (Tilesius). Irish Lord.
142. (2309) *Calycilepidotus spinosus** Ayres. Taken by us north to Cape Johnson, Washington.
143. (2310) *Aspicottus bison** Girard. Buffalo.
144. (2314) *Cottus asper** Richardson. Some of the species of *Cottus* here listed are probably not valid; all need further study.
145. (2315) *Cottus gulosus** (Girard).
146. (2327) *Cottus klamathensis* Gilbert.
147. (2316) *Cottus evermanni* Gilbert.
148. (2317) *Cottus rhotheus** Smith.
149. (2319) *Cottus bairdii punctulatus* Cope.
150. (2330) *Cottus beldingii* Eigenmann and Eigenmann.
151. (2326) *Cottus perplexus* Gilbert and Evermann.
152. (2328) *Cottus aleuticus** Gilbert.
153. (2335) *Cottus princeps* Gilbert.
154. (2336) *Cottus bendirei* (Bean).
155. (2338) *Cottus marginatus* (Bean).
156. (2339) *Cottus tenuis* (Evermann and Meek).
157. (2351) *Myoxocephalus polyacanthocephalus* (Pallas).
158. (2361) *Zesticelus profundorum* (Gilbert) Known only from great depths off Alaska and California.
159. (2362) *Dasycottus setiger* Bean.
160. *Malacocottus kincaidi** Gilbert and Thompson. Abundant in Hoods Canal near Holly.
161. (2379) *Leptocottus armatus armatus** Girard. Bullhead. (1921c).
162. (2384a, on p. 3179) *Rusciculus rimensis** Greeley. (1926e: 5) Taken by us north to Cape Johnson, Washington, and by J. R. Dymond at Gabriola Island, British Columbia; described by Gilbert and Thompson as *Stelgidonotus latifrons* from Friday Harbor, Washington, and as such recorded by Evermann and Goldsborough from Admiralty Head, Washington.
163. (2381) *Oligocottus maculosus** Girard. (1926e: 6).
164. (2384b, on p. 3181) *Dialarchus snyderi** Greeley. (1926e: 8) Abundant on reefs of outer coast of Oregon and Washington.
165. (2384) *Allocottus embryum** (Jordan and Starks). (1926e: 14).
166. (2383) *Oxycottus acuticeps** (Gilbert). (1926e: 15).
167. (2385a) *Blennicottus globiceps** (Girard). (1926e: 17).
168. (2387) *Blepsias cirrhosus** (Pallas).
169. (2389) *Nautichthys oculo-fasciatus** (Girard).
170. (2393) *Synchirus gilli* Bean.
171. (2394) *Ascelichthys rhodorus** Jordan and Gilbert.
172. (2395) *Psychrolutes paradoxus* Günther.
173. (2396) *Gilbertidia sigolutes** (Jordan and Starks). Abundant in cavities of sponges, Hoods Canal.

Family XLVII.
RHAMPHOCOTTIDAE.

174. (2397) *Rhamphocottus richardsoni** Günther. "Sea horse".

Family XLVIII.
AGONIDAE. Sea poachers.

175. (2400) *Hypsagonus quadricornis* (Cuvier and Valenciennes).
176. (2401) *Stellerina xyosterna* (Jordan and Gilbert).
177. (2402) *Occa verrucosa* (Lockington).
178. (2407) *Pallasina aix** Starks.
179. (2413) *Podothecus acipenserinus** (Tilesius). Alligator fish.
180. (2417) *Averruncus emmelane** Jordan and Starks.
181. (2426) *Xeneretmus triacanthus** (Gilbert).
182. (2425) *Xenopyxis latifrons** (Gilbert).
183. (2423) *Asterotheca pentacantha* (Gilbert).
184. *Asterotheca infraspinata** (Gilbert).
185. (2424) *Asterotheca alascana* (Gilbert).
186. (2422) *Bathyagonus nigripinnis** (Gilbert.
187. (2427) *Odontopyxis trispinosus* Lockington.
188. (2428) *Bothragonus swanii** (Steindachner). Taken by us near Cape Johnson, Washington.
189. (2433) *Anoplagonus inermis* (Günther).

Family XLIX.
CYCLOPTERIDAE. The lump suckers.

190. (2436) *Eumicrotremus orbis* (Günther).

Family L.
LIPARIDIDAE. The rock-suckers.

191. (2445 and 2446) *Neoliparis mucosus** (Ayres).
192. (2444) *Neoliparis callyodon* (Pallas).
193. (2447) *Polypera greeni* (Jordan and Starks).
194. (2450) *Liparis cyclopus* Günther. [I have not yet studied our liparid material, which comprises several species.]
195. (2455) *Liparis dennyi* Jordan and Starks.
196. (2451) *Liparis fucensis* Gilbert.
197. (2457) *Liparis pulchellus* Ayres.
198. (2468) *Careproctus melanurus* Gilbert.

199. (2469a, on p. 2866) *Careproctus cypselurus* (Jordan and Gilbert).
200. (2473) *Paraliparis cephalus* Gilbert.
201. (2475) *Paraliparis mento* Gilbert.
202. (2478) *Paraliparis ulochir* Gilbert. Recorded from Gulf of California and Bering Sea.
203. *Paraliparis deani* Burke. Recorded from Alaska and California.
204. *Rhinoliparis attenuatus* Burke. Recorded from Bering Sea and Monterey Bay.
205. *Nectoliparis pelagicus* Gilbert and Burke.

Family LI.

GASTEROSTEIDAE. The sticklebacks.

206. (1098, 1099 and 1100) *Gasterosteus aculeatus aculeatus** Linnaeus. (1925c: 201).
207. (1101a) *Gasterosteus aculeatus microcephalu** Girard. (1919a, and 1925c: 201).
208. (1103) *Aulorhynchus flavidus** Girard.

Family LII.

SYNGNATHIDAE. The pipefishes.

209. (1113) *Syngnathus griseo-lineatus** Ayres. (1916a: 159, and 1921g: 2).

Family LIII.

GOBIIDAE. The gobies.

210. (2537) *Rhinogobiops nicholsii** (Bean). (1926c: 1).
211. (2581) *Lepidogobius lepidus** (Girard). (1926c: 3).
212. (2582) *Gillichthys mirabilis* Cooper. (1921f: 1, and 1926c: 3).
213. (2584) *Quietula y-cauda* (Jenkins and Evermann). (1921f: 4) Recorded north of California only from Vancouver Island.
214. (2586 and 2587) *Clevelandia ios** (Jordan and Gilbert). (1921f: 5).

Family LIV.

BATHYMASTERIDAE. The ronquils.

215. (2627) *Ronquilus jordani** (Gilbert). Ronquil.

Family LV.

TRICHODONTIDAE. The sandfishes.

216. (2632) *Trichodon trichodon** (Tilesius). Sandfish.

Family LVI.

BATRACHOIDIDAE. The toadfishes.

217. (2654) *Porichthys notatus** Girard. Singing fish; midshipman.

Family LVII.

GOBIESOCIDAE. The clingfishes.

218. (2659) *Caularchus maeandricus** (Girard).

Family LVIII.

CLINIDAE. The tropical blennies.

219. *Gibbonsia elegans montereyensis* Hubbs. Kelpfish. (1927b: 354). Known north of California only from Vancouver Island.
220. (2688) *Heterostichus rostratus* Girard. Kelpfish. Recorded north of California only from British Columbia.

Family LIX.

ANARHICHADIDAE. The wolf-fishes.

221. (2806) *Anarrhichthys ocellatus** Ayres. Wolf-eel. (1916a: 165).

Family LX.

STICHAEIDAE. The northern blennies or "eels."

222. (2765) *Bryostemma nugator** Jordan and Williams.
223. (2764, part) *Bryostemma decoratum* Jordan and Snyder.
224. (2777) *Anoplarchus purpurescens purpurescens** Gill. (1927b: 374).
225. (2779 and 2780) *Phytichthys chirus chirus** (Jordan and Gilbert). 1927b: 383).
226. (2781) *Xiphister mucosus** (Girard). (1927b: 384). "Eel".
227. (2782) *Epigeichthys atro-purpureus** (Kittlitz). (1927b: 386).
228. (2787) *Plectobranchus evides** Gilbert.
229. (2789) *Poroclinus rothrocki* Bean. Recorded from deep-water off Alaska and California.
230. (2791) *Lumpenus anguillaris** (Pallas).
231. (2798) *Delolepis giganteus** (Kittlitz). (1927b: 377). "Congo eel." Taken by us south to Heceta Head, Oregon.
232. (2800) *Lyconectes aleutensis** Gilbert. Red devil. Taken for us in Hoods Canal, Washington.

Family LXI.

PHOLIDIDAE. The butterfishes.

233. (2774, part) *Pholis ornatus** (Girard). (1927b: 389)
234. (2774, part) *Pholis laetus** (Cope). A valid species long confused with *P. ornatus*, ranging from Alaska south to Del Norte County, California.
235. (2774, part). *Pholis schultzi** Hubbs. (1928b) A reef species ranging from Puget Sound to Del Norte County, California.
236. (2766 and 2767) *Apodichthys flavidus** Girard. (1927b: 390)
237. (2768) *Xererpes fucorum** (Jordan and Gilbert). (1927b: 392)

Family LXII.

SCYTALINIDAE. The burrowing blennies.

238. (2811) *Scytalina cerdale* Jordan and Gilbert. (1927b: 393)

Family LXIII.

ZOARCIDAE. The eel-pouts.

239. (2814) *Embryx crotalinus* (Gilbert). Recorded only from Alaska and southern California.
240. (2815) *Lycodopsis pacificus** (Collett).
241. (2826) *Lycodes palearis* Gilbert.
242. (2827) *Lycodes brevipes* Bean.
243. (2835) *Furcimanus diaptera* (Gilbert).
244. *Bothrocara remigera* Gilbert.
245. (2839, part) *Lycogramma brunnea* (Bean). (1925c: 321)
246. (2864) *Lycodapus fierasfer* Gilbert.

Family LXIV.

BROTULIDAE. The brotuloid fishes.

247. (2873) *Brosmophycis marginatus** (Ayres).

Family LXV.

AMMODYDITAE. The sand launces.

248. (1214) *Ammodytes tobianus personatus** (Girard).

Family LXVI.

GADIDAE. The cods.

249. (2901) *Merluccius productus** (Ayres). California hake.

250. (2905) *Theragra chalcogramma fucensis* (Jordan and Gilbert). Puget Sound pollack.

251. (2907) *Microgadus proximus** (Girard). Tom-cod.

252. (2910) *Gadus macrocephalus** Tilesius. Pacific cod. (1925c: 326)

253. (2915) *Antimora microlepis* Bean. Recorded from Alaska, British Columbia and California.

Family LXVII.

CORYPHAENOIDIDAE. The grenadiers.

254. (2948) *Coryphaenoides pectoralis* (Gilbert). (1916b: 161)

255. (2961) *Coryphaenoides acrolepis* (Bean). (1916b: 143 and 162)

Family LXVIII.

PLEURONECTIDAE. The flounders.

256. (2975) *Atheresthes stomias* (Jordan and Gilbert). Arrow-tooth halibut.

257. (2977) *Hippoglossus hippoglossus** (Linnaeus). Halibut.

258. (2978) *Lyopsetta exilis** (Jordan and Gilbert). (1916a: 168)

259. (2979) *Eopsetta jordani** (Lockington). Sole.

260. (2981) *Hippoglossoides elassodon* Jordan and Gilbert. (1918e: 373)

261 (2984) *Psettichthys melanostictus** Girard. English sole.

262. (3007) *Pleuronichthys coenosus** Girard. Sole. (1916a: 169) I find no grounds for the separation of the nominal Puget Sound species *P. nephelus* Starks and Thompson.

263. (3009) *Parophrys vetulus** Girard. Small sole.

264. (3010) *Inopsetta ischyra* (Jordan and Gilbert).

265. (3011) *Isopsetta isolepis* (Lockington). Rock sole.

266. (3012) *Lepidopsetta bilineata** (Ayres). Sole. (1918e: 376)

267 (3023) *Platichthys stellatus rugosus** Girard. Flounder. (1915a: 488)

268. (3025) *Microstomus pacificus* (Lockington). Chinese sole.

269. (3028) *Errex zachirus** (Lockington). Rex sole.

Family LXIX.

BOTHIDAE. The sand dabs.

270. (3048) *Citharichthys sordidus* (Girard). Sand dab.

271. (3051) *Citharichthys stigmaeus** Jordan and Gilbert. Speckled sand dab.

The Pan-Pacific Research Institute will welcome check-lists of the fish of any country of the Pacific, or of any portion of the Pacific Ocean, these lists to be published in the Journal of the Pan-Pacific Research Institution and bound together finally in book form.

Science papers are welcomed. The very technical ones will be published in the Journal of the Institute while Popular Science articles with illustrations will be held for use in the quarterly, Popular Science number, of the Mid-Pacific Magazine.